



RAM

**HIGH RADIATION
VIDICON
TELEVISION
CAMERA
MODEL CH-1070-R**

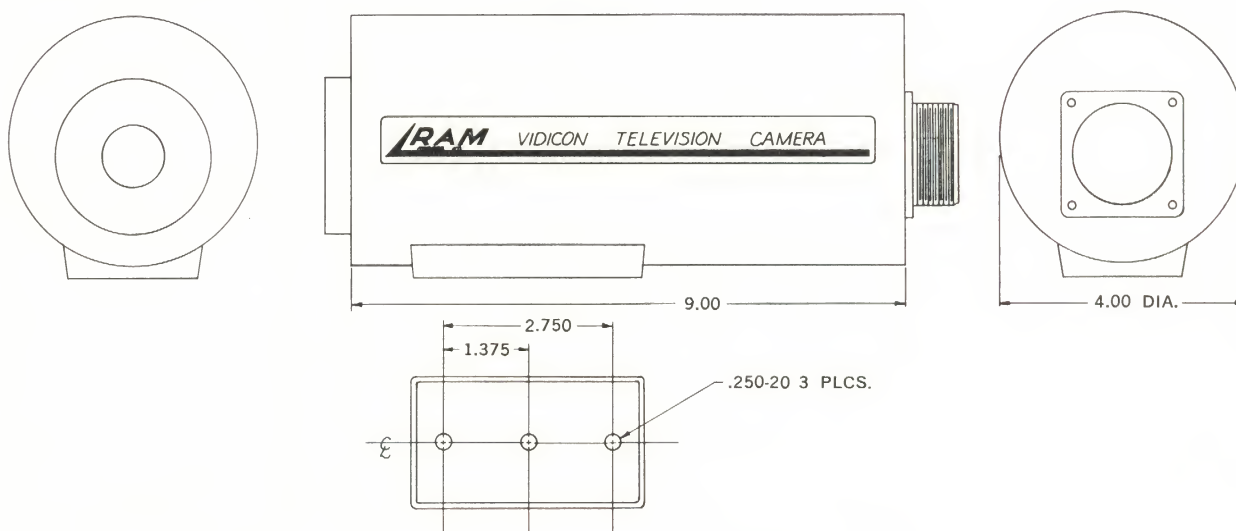
The Model CH-1070-R Television Camera Head consists of only the vidicon assembly and pre-amplifier. Design parameters have been met for operation of the camera in extreme environments of gamma radiation and fast neutrons. Careful consideration has been given to total dosage as well as the dosage rate.

The Camera Head utilizes nuvistors and can be supplied with a quartz faceplate non-browning vidicon. Construction is of plug-in fiberglass module boards, anodized aluminum case and frame, with no teflon materials.

There are no intermediate assemblies or circuitry between the CH-1070-R Camera Head and the required processing unit, the CC-1070 Camera Control. The CC-1070-R is completely transistorized with plug-in modules and is available with both a standard 525 line scan rate and other accelerated scan frequencies. Electronic specifications for the CH-1070-R are identical to those for the CH-1070-T.

Model CH-1070-RX, with the inclusion of Model CO-1070 Environmental Enclosure, meets the requirements of MIL-E-5272 for explosion-proof operation.

Refer to Camera Model CH-1070-T Data Sheet for performance specifications.



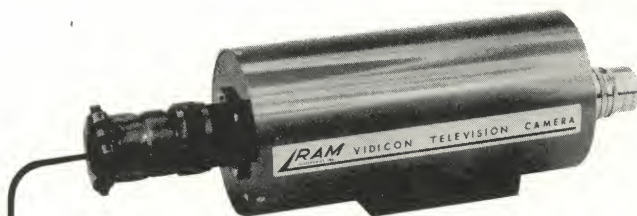
CANOGA

RAM TELEVISION PRODUCTS DIVISION

CANOGA ELECTRONICS CORPORATION

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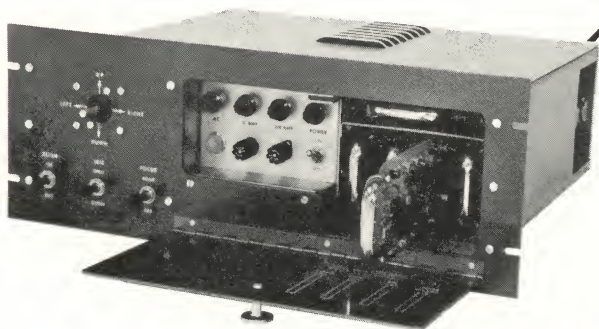
REV.
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The ruggedized camera head contains the vidicon assembly and pre-amplifier. The compact design with careful filtering and shielding prevents RF pickup and eliminates microphonics. Rugged construction provides reliable operation under extreme environmental conditions. Model CH-1070-TX, with the addition of Model CO-1070 Enclosure meets the requirements of MIL-E-5272 for explosion-proof operation.

OPERATIONAL
WITH 2000' OF CABLE

The Camera Control provides all control voltages to the camera head, processes and amplifies the incoming signals to produce composite video. All solid state circuitry and plug-in module boards assure high reliability and permit easy service. Modular sub-assemblies include sync generator, video amplifier, deflection amplifier and power supply. A hinged front door provides easy access to the secondary controls.



RAM

MINIATURE VIDICON TELEVISION CAMERA MODEL CH-1070-T

FEATURES CH-1070-T

- ALL SOLID STATE EXCEPT VIDICON
- PLUG-IN MODULAR CONSTRUCTION
- SMALL CYLINDRICAL DESIGN
- VIDICON PROTECTION CIRCUIT
- SHOCK AND VIBRATION RESISTANT
- 750 LINE RESOLUTION

FEATURES CC-1070

- ALL SOLID STATE
- PLUG-IN MODULAR CONSTRUCTION
- SET-UP TEST POINTS COLOR CODED
- REGULATED POWER SUPPLIES
- ACCEPTS EIA EXTERNAL SYNC
- DUAL VIDEO OUTPUTS
- PAN & TILT AND ZOOM LENS CONTROL OPTIONAL

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SPECIFICATIONS

SYSTEM

Resolution: 750 Lines Minimum, 10 Shades Grey Scale
Useable Light Level: Less than 1 Foot Candle
Aspect Ratio: 3 x 4
Scanning: 60 Fields, 30 Frames, 2:1 Interlace
Vertical Frequency: 60 cps
Horizontal Frequency: 15,750 cps (525 Line)
Geometric Distortion: $\pm 2\%$
Sweep Linearity: $\pm 1\%$
Video Bandwidth: 10 Mc ± 1 db, Less than 2% Tilt at 60 cps
Aperture Correction: Phaseless Delay Adjust — 3 db to + 12 db
Gamma Correction: Built In
High Peaking: Adjustable for Vidicon
Sweep Protect: Solid State, Horizontal and Vertical
RF Noise: Built In Line Filters
Cable Length: Operational to 2,000 Feet
CAMERA HEAD
Noise Level: 175 db Above .0002 dyne/cm²
Vibration: 5 to 55 cps at .06" Excursion, 55 to 500 cps 20G
Shock: 75G, 3 Axes
Temperature: - 10°C to + 65°C
Humidity: 100%
Acceleration: 75G, 3 Axes
Explosion: MIL-E-5272C (Model 1070X)
Auto Target: 4,000:1 (Manual Override)
Shielding: Vidicon, Mu-Metal
Lens Mount: Standard 16mm "C" Mount
Connector: MS-3102R-28-21P
Vidicon: 7735A or Equivalent
Dimensions: 4" Diameter x 9" Length
Construction: Plug-In Epoxy Glass Modules, Anodized Aluminum Case & Frame
Color: Ram Grey, Semi-Gloss

Weight: 4 Pounds

Mounting: 1/4 x 20, 3 Places

CAMERA CONTROL

Input Power: 117 VAC $\pm 10\%$, 60 cps ± 2 cps

Power Consumption: 30 Watts

Sync Generator: Xtal Controlled, Linelock, & Free Run.
AFC Pull In ± 3 cps (Accepts EIA External Sync)

Blanking: Horizontal & Vertical to EIA Standards

Video Outputs: (2) 1.4V PP Black Negative into 75 Ohms

Sync Outputs: Horizontal & Vertical Sync Blanking

Keyed Clamps: Balanced

White Peak Clipper: Adjustable

Low Voltage Power: Supply: Regulated $\pm 1\%$

Focus Current: Regulated $\pm .1\%$

Primary Controls: Beam, Target, Focus, Pedestal, Power On-Off

Secondary Controls: Xtal-Mo, AFC-Free Run, 31.5 KC, Focus, — 12VDC, Counters

Horizontal Size

Horizontal Linearity

Horizontal Center

Vertical Size

Vertical Linearity

Vertical Center

Video (Aperture Correct, White Clipper, Gain, High Peaking)

Set-Up Test Points: Color Coded

Connector: MS-3102R-28-21-5

Video Output Conns.: BNC

Temperature: - 10°C to + 50°C

Humidity: 95%

Dimensions: 5 1/4" H x 19" W x 14 1/2" D

Construction: Plug-In Epoxy Glass Modules, Aluminum, Anodized

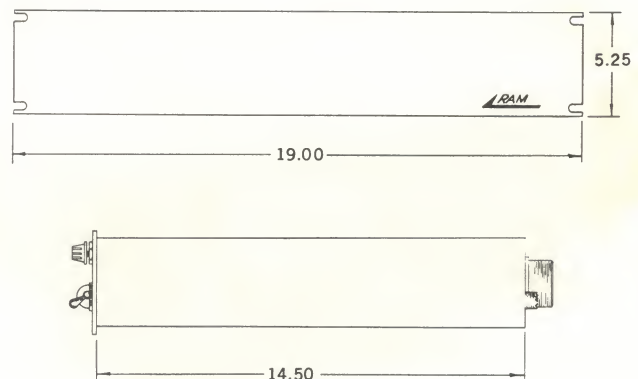
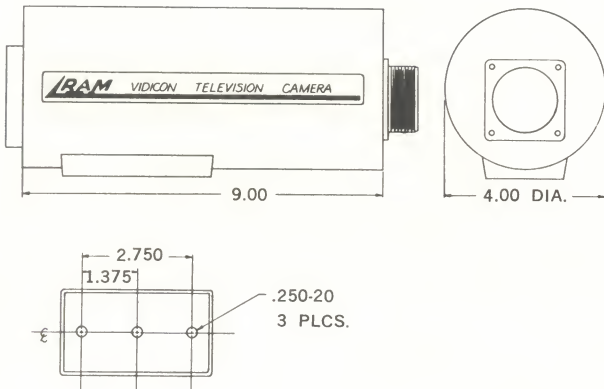
Color: Ram Grey, Semi-Gloss

Weight: 19 Pounds

AVAILABLE ACCESSORIES

High Radiation Nuvistor Head
 Binary Sync Generator
 729 Line Scan Rate
 Optics Cover

Remote Optical Focus
 Remote 4-Lens Turret
 Stainless Steel Case
 Dual Camera Control Unit



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